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the story of
**GREEN MOUNTAIN
NATIONAL FOREST**
in Vermont





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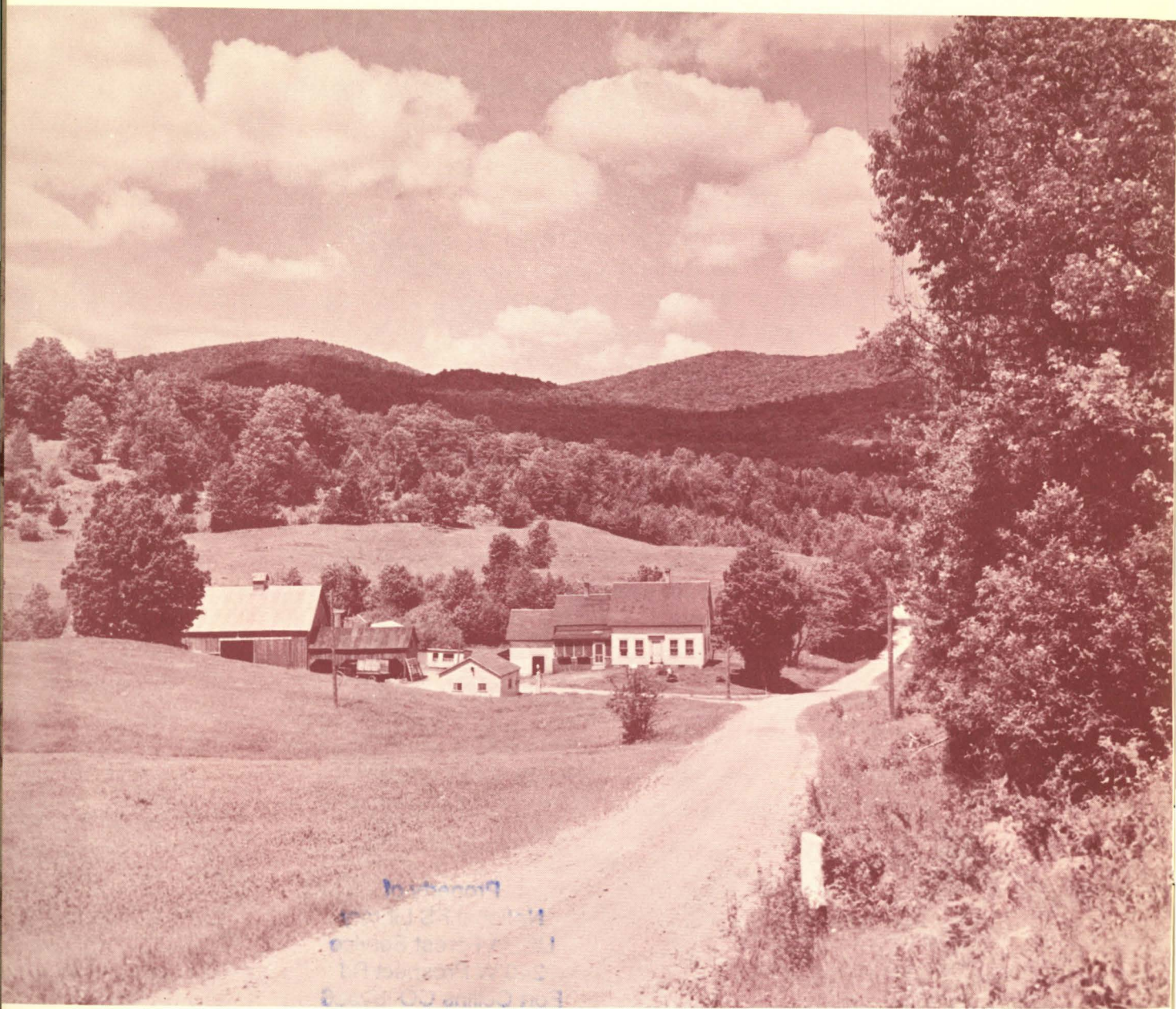
What is Green Mountain National Forest? What is its purpose?
What does it provide?

These and many other questions might be asked about each of the National Forests of the United States. National Forests that number 154, are located in 40 States and Puerto Rico, and aggregate more than 181 million acres in area.

Green Mountain National Forest in Central and Southern Vermont is one unit in this National Forest system. It is rich in history, endowed with valuable resources, and capable of producing numerous values and benefits. Its resources are important to the welfare and happiness of many people.

This booklet has been written to answer questions about Green Mountain National Forest; to provide information about its origin, its work, its purpose, and its contribution to the general economy of Vermont and the Nation.

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The beauty and serenity of Vermont's Green Mountains are sometimes best appreciated on rural roads.

It took a lot of wood to build the United States

Let's assume for a moment that we are at the beginning of the present century. A healthy, dynamic Nation is building factories, homes, office buildings, and other structures at a lusty rate. Lumberjacks and sawmill operators are hard pressed to produce enough lumber to meet the demand for building material. In 1907 lumber production reaches a peak of 46 billion board feet. An inventory made in that year indicates that forest fires, insects, tree diseases, land clearing, and timber harvesting are depleting forest resources.

Near Lancaster, New Hampshire, just across the Connecticut River from the Green Mountain State, stands Mount Prospect. On its summit is the former summer home of an early-day conservationist, John W. Weeks. Mr. Weeks served his country well as a member of the United States Congress, first in the House and then in the Senate. Later, he was Secretary of War in the Cabinets of President Harding and his successor, a distinguished Vermonter, Calvin Coolidge.

In 1908 Mr. Weeks introduces a Bill to enable the United States to purchase land for National Forests on the headwaters of navigable streams to protect their flow. The Nation isn't quite ready for this legislation but, a few years later, a similar measure introduced by Mr. Weeks passes both houses of Congress. On March 1, 1911, it is approved by President Taft. This Act, known as the Weeks Law, authorizes the Federal Government to purchase land for National Forests with the consent of the State in which the land is located. It also makes provision for cooperation between the States and the Federal Government in forest-fire control.

A National Forest is born

In 1925, when Mr. Coolidge was President and Mr. Weeks was Secretary of War, the legislature of Vermont passed a measure giving consent to the purchase of land by the Federal Government for a National Forest. In 1928 the National Forest Reservation Commission, created by the Weeks Law, established a purchase unit which became the present Central District of Green Mountain National Forest.

Additional purchase units were established in 1934 and 1937 and have become the Northern and Southern Districts of Green Mountain National Forest. The three units encompass an area of 630 thousand acres. About 500 thousand acres are suitable for a National Forest, the other lands are adaptable for summer homes, farms, and other uses.

The Weeks Law and the Vermont Enabling Act have been amended a number of times since initial enactment, but together they constitute the legal basis for a National Forest in Vermont.

The infant matures

The land of the Marshall Hapgood Estate in the Town of Peru, Bennington County, Vermont, was the first purchased by the Federal Government in giving substance to Green Mountain National Forest. This and several other tracts were acquired in 1931. Other tracts have been purchased since and the total area now owned by the United States and administered as Green Mountain National Forest is nearly 232 thousand acres.

This land has been purchased from owners who wished to sell. Friendly legal proceedings have been used to guarantee clear title to the people of the United States. The average price paid for the land is \$9.28 an acre, a total investment of \$2,120,000.

At time of purchase most of this land was clothed with second growth timber; the original forest had been harvested in earlier years. Some purchases included long abandoned fields, now marked only by stone walls in the woods, the only remaining vestiges of the homesteads of early day settlers.



Rustic signs guide the visitor to points of interest in Green Mountain National Forest.

Forest land is productive land

A forest is far more than a collection of trees. To be sure, it is a source of wood and other tree products but it is also the favored habitat of many species of wild animals and birds. It provides a superb setting for outdoor recreation. Most importantly, it is a factor in the hydrologic cycle which brings water to otherwise parched earth. The forest is a living entity and supplies many material and spiritual elements which are vital in human life and happiness.

This versatility of the forest and its ability to produce many values and benefits constitute the basis for the multiple-use management practiced on all the National Forests in the United States. The land which is included in Green Mountain National Forest is not retired land. On the contrary, it is intensively managed and carefully protected so that its resources are available for use.

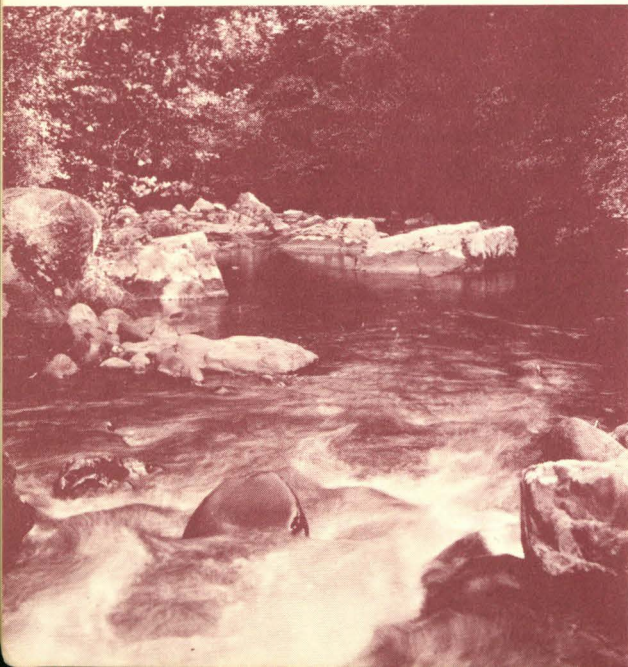
Let's take a closer look at these resources and find out how they are managed.

Water—the key item

If you can imagine 300 billion 1-gallon containers filled with water you can picture the volume of water used in this country in just one day. Multiply that by two and by three and you will approximate the quantities likely to be needed in 1980 and 2000.

Protection of the headwaters of navigable streams was the expressed purpose of the Weeks Law when enacted in 1911, and watershed management continues to be a principal factor in National Forest administration. Measures are prescribed and applied to stabilize streamflow, curb erosion and gullyng, and prevent sedimentation. All forms of physical development, all uses of resources, all plans for forest protection and management, take into account the increasing need for good water for domestic consumption, for recreation, for navigation, and for all the other purposes served by this indispensable fluid. Every effort is made to assure that streams emerging from Green Mountain National Forest will consist of clean, clear water—free of silt, free of pollution.

Some headwater tributaries of the historic Hudson and Connecticut Rivers lie within the boundaries of this National Forest so it can be said that the management of those tributaries affects the many industries and cities lining the banks of those great streams. More readily apparent and more immediately significant is the benefit to the Vermont towns and villages whose watersheds lie within those boundaries and to a host of fishermen seeking the wily trout.



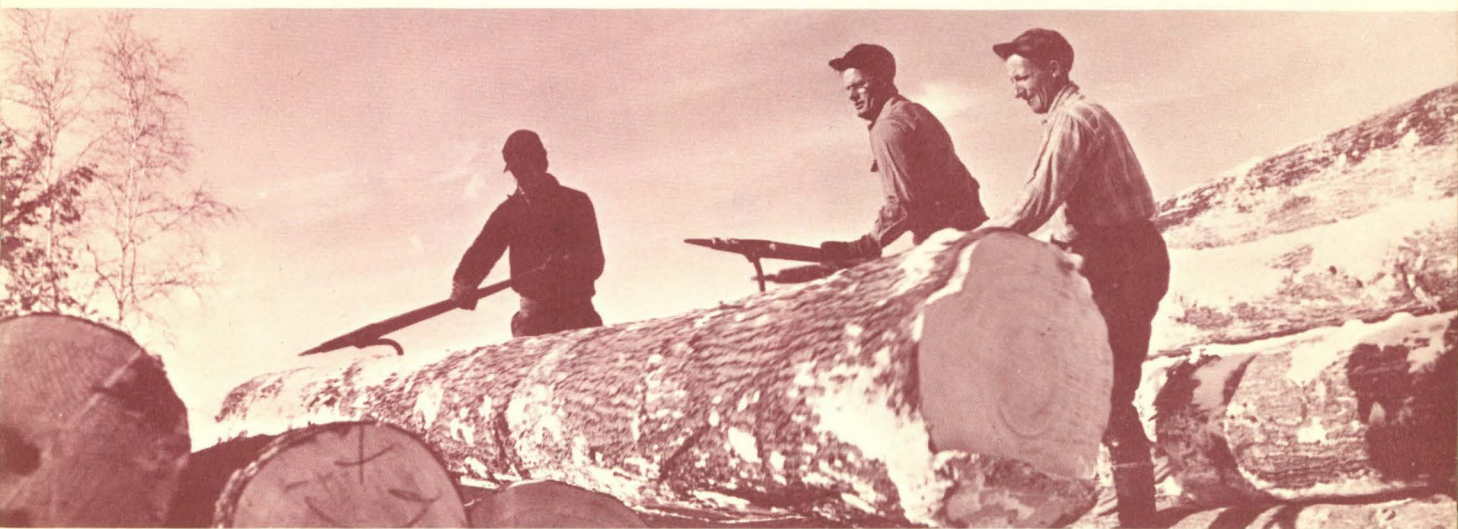
Well-managed, forested watersheds regulate stream flow and provide an abundance of clean water.

Timber is a crop...

In Vermont, 400 industrial plants use wood as raw material. Together they employ 10 thousand men and women who in turn support about 25 thousand others. Wood products manufactured in the State include lumber, flooring, posts, poles, veneer, plywood, furniture, bowls, toys, pulp, novelties, handles for tools, sporting goods, and other items. The products manufactured in a year's time have a value at the mills in excess of \$110 million.

Many Vermont industries, families, local units of Government, and the State itself, are in some measure economically dependent upon a continuing and ample supply of good timber available at reasonable cost.

Green Mountain National Forest produces a substantial portion of the raw material needed by wood-using industries within and near its boundaries. In the last 20 years an average of 9.1 million board feet of National Forest timber has been harvested each year and converted to consumer goods at the plants of those who purchased it. The harvest is limited to mature trees or those that should be removed because they are diseased or insect-infested. A block of timber ready to be harvested is appraised by Forest Rangers and sold to the highest responsible bidder. The Rangers mark or designate the trees to be cut, thus insuring the retention of healthy, fast-growing trees to develop into a later crop of good quality timber.



Harvest of mature timber maintains a healthy forest and provides employment for many people.

...and like a crop it should be cultivated

The second-growth timber acquired with the land purchased for Green Mountain National Forest was mostly of poor to mediocre quality. Early-day logging operations had very generally been of the so-called "high-grading" type. Trees of the best quality and of the most favored species were removed, leaving a stand of culls and trees of poor form and of the less desirable species. Some stands, particularly those growing on abandoned fields, were stagnant because of overcrowding.

To be sure, some timber of good quality and some healthy, promising young stands were also acquired but corrective measures had to be applied to the low quality growth in order that the area's capacity for timber production might be attained. Timber stand improvement activities were initiated and have continued at the maximum possible rate ever since enrollees of the Civilian Conservation Corps pruned and thinned a stand of "pasture spruce" near Hapgood Pond in Peru in 1933. Improvement cuttings designed to better the composition and growing condition of second-growth hardwood stands were begun about the same time and have been carried on since with local workers.

Reforestation by planting seedlings has been applied when necessary to bring about a satisfactory stocking with desirable species of trees.

The forest is a renewable resource. Given intensive care and adequate protection, it renews itself and produces material for successive harvests. This is *sustained yield*, the objective of timber management on Green Mountain National Forest.



Growing conditions in this 30-year-old spruce plantation are materially improved by thinning and pruning.

Fun in the mountains

Snow Valley, Mt. Snow, Big Bromley, Stratton Mountain, Sugarbush—these are names well established in the East and becoming known throughout the land—synonyms for fun in the snow—titles for areas of land in Green Mountain National Forest where individuals and companies have built facilities for winter sports—designations which bring to mind ski lodges, shops, lifts, trails, headlong runs down mountains, and at day's end, good fellowship around a fire of logs.

Hapgood Pond, Greendale, White Rocks, Texas Falls—these also are names associated with enjoyment of leisure time though in less rigorous forms like camping and picnicking. These are areas for summer recreation built and operated by the Forest Service and enjoyed by



The rapidly increasing popularity of winter sports has resulted in the development of numerous fine facilities within Green Mountain National Forest.

America's finest institution—the family. The Hapgood Pond area includes a clean, safe beach and swimming facility as well as family picnic and camping units.

So rapidly has use of summer recreation facilities increased—statistics are presented later—that each of the four areas now in existence has been expanded to its limits of capacity. Hence, plans have been prepared for development of new areas which will include additional camping and picnicking units and facilities for water sports.

The more elaborate (and far more expensive) facilities needed for winter sports are nearly always built by private enterprise. When National Forest land is involved the Forest Service issues a permit which makes provision for suitable development. A fee based upon income and expense is charged for the use of the land.

The forest is also the ideal setting for several other forms of recreation. Photography; collecting minerals; observing animals and birds; enjoying the scenery, the autumn colors, and inspirational values; hunting and fishing. All these are enjoyed by thousands upon thousands of visitors.

Special mention should be made of trail hiking because the National Forest contains a portion of the well-known Long Trail, part of the famous Appalachian Trail. Initially built by the Green Mountain Club, a pioneer trail organization, and with shelters averaging a day's hike apart, the Long Trail extends the entire length of the State. It is enjoyed by many who spend a day, a month, or an entire summer along its route.

Let's go hunting...

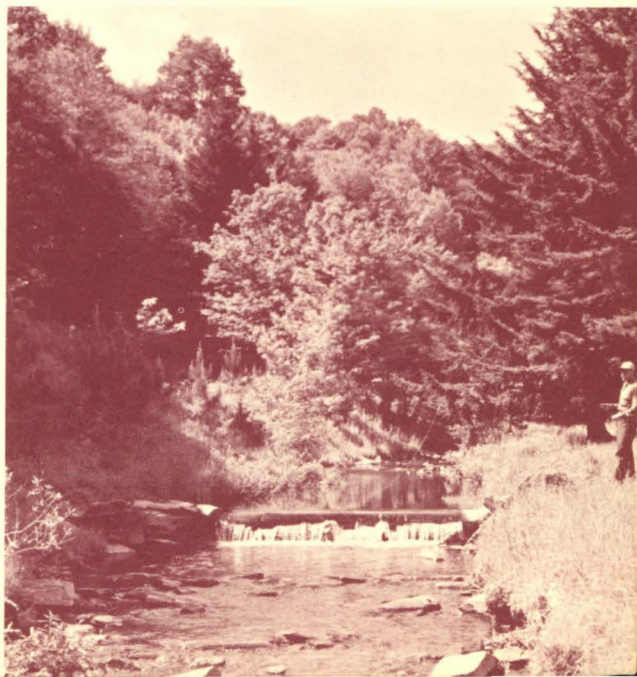
In proper season bring your gun and a Vermont hunting license. A deer or bear can hardly be guaranteed, but good hunting is assured because game animals are present in ample number. Not a single acre of National Forest land is closed to hunting. You need only comply with the laws of Vermont with respect to seasons and bag limits.

...or fishing.

Bring your favorite fishing rod and an assortment of lures. In 1961, as in other years, 90,000 trout were stocked in 1,100 acres of lakes and ponds and 216 miles of fishing streams. Stream and lake improvement has been undertaken on some of these waters and more is programmed. Fishing, like hunting, is regulated by State law and not a mile of stream or an acre of pond is closed to legitimate enjoyment of this sport.

Management of the wildlife resource affords a splendid opportunity for interested organizations to cooperate in improving habitat, in setting bag limits and seasons in stocking fish, in conducting research in wildlife management, and in making it possible for a maximum of sportsmen to enjoy their favorite pastimes. This opportunity has been abundantly exploited on Green Mountain National Forest where cooperative agreements have been developed between the Forest Service, the U.S. Fish and Wildlife Service, and the Vermont Fish and Game Service. These agreements provide for biological surveys of lakes and streams, installation of impoundments, development of facilities for use of impounded waters, stream and lake stocking, habitat improvement, and correlation with use and development of other resources.

Simple log structures materially improve the habitat for trout.



National Forest resources are for use . . .

The dictionary defines a resource as "that on which one depends for help or support." The thought of human dependency is implied in any definition and is clearly evident in the case of the four major forest resources which have been discussed. Water, wood, recreation, wildlife—how dependent we are upon them! How barren, and even impossible, life would be without them! That fact was evident when the settlers of Jamestown built their homes, warehouses, a church, a school, and other buildings of wood; fished and hunted for food and fiber; drew water from springs and streams.

Conservation was not a matter of concern at Jamestown, may not even have been given a thought. Resource use to support life and to provide comfort was the first consideration and continued to be dominant throughout the Nation for nearly three centuries. Not until it became clear that nature's bounty could be damaged and even destroyed did the principle of conservation come into the thoughts of men. Among those men were dynamic Theodore Roosevelt and able forester Gifford Pinchot. To them, as to others, it was obvious that the Nation had to use its resources in order to live. It was equally apparent to these men that the Nation had to care for those resources, protect them, and use them wisely. Natural resources—how best to use them, how to perpetuate them—became subjects of general interest. Proper use, with provision for renewal — *sustained yield* — became widely accepted principles of conservation.

Utilization of natural resources with provision for replacement has been the principle of conservation applied on the National Forests ever since Theodore Roosevelt and Gifford Pinchot established the National Forest system in 1905. *National Forests are lands of many uses.*

...and provide many benefits

In addition to the investment in land, some \$3 million has been spent on capital improvements in Green Mountain National Forest. Much has been accomplished with that expenditure. Some of these accomplishments and benefits are:

Development of an access road system of 235 miles. The National Forest has built 93 miles of this system.

A hiker trail system of 185 miles has been developed and is maintained by the Forest Service. A number of trail shelters have been built for the comfort and safety of hikers.

Four summer recreation areas have been built with a capacity of 60 family picnicking and 28 family camping units. One of the areas includes facilities for water sports. Suitable land has been made available for private development of five winter sports areas.

Trees have been planted on 1,400 acres of lands to improve the productivity of the area. Timber-stand improvement measures have been applied on 26,500 acres.

Land within the National Forest has been intensively protected against fire, destructive insects, and tree diseases. So effective is the fire protection system that fires average only 3 per year with a burned area of 18 acres. Insect infestations have not been permitted to attain epidemic proportions. Losses to tree diseases have been held to a minimum.



A number of plants in Vermont manufacture veneer and plywood from high-grade timber.

Cooperation has been given State conservation agencies in the management and protection of privately owned forest land and in the development of a wildlife program. Fish have been stocked each year in many miles of National Forest streams and many acres of lakes and ponds.

Merchantable timber has been made available to industries to the extent of more than 9 million board feet in the average year.

Employment levels have been maintained for local people by supplying wood-using industries with timber resources. Many have benefited by direct employment in National Forest enterprises.

Careful husbandry has produced substantial benefits like prevention of erosion and sedimentation and the provision of clean water.

With not a single acre of land or mile of stream posted against use, Green Mountain National Forest constitutes a very large area of land on which public hunting and fishing are permitted and regulated only by the State laws.

Income from all sources has been shared with the Towns in which National Forest land is located. Twenty-five percent of the gross receipts is distributed to the Towns in accordance with the area of National Forest for expenditure on its road and trail system. The remainder is deposited in the Treasury of the United States.

Development continues

Concerning forest resources, this is certain—demands against them are becoming greater and will continue to increase. The population of the United States is increasing, its industries are expanding, standards of living become even higher, needs created by exploration and travel in space, and manufacture of new items; these and other factors make it clear that natural resources will be needed in ever larger volumes. Earlier it was pointed out that use of water will about double in less than 20 years, triple in less than 40. Only slightly less spectacular increases are forecast in the need for timber, recreation facilities, fish and game resources, and other forest products.

This readily predictable increase in demand prompted the preparation of A Development Program For The National Forests. Submitted to Congress by the President in September 1961, this program includes provision for project work and activities needed to adequately prepare the National Forests to meet the public demand for goods and services they can provide.

The program includes a substantial volume of activity on Green Mountain National Forest—expansion of the access road system to facilitate care, management, and use of resources; development of additional facilities for forest recreation; improvement of streams; prevention of erosion; completion of the tree planting job; application of cultural measures on many acres of timber stands not now in good condition; purchase of key areas of land, especially those needed for recreation purposes. The program contemplates an expenditure of \$6.8 million for these purposes in the next 10 years. Its consummation will double the unit's production of timber, enable it to meet the currently apparent increase in demand for recreation, provide better hunting and fishing and generally adapt the area to the needs of the modern world.

People do the work

Green Mountain National Forest activities are planned and directed by a Forest Supervisor, a staff of technical assistants, and a business management unit headquartered in Rutland, Vermont. Forest Rangers who are directly responsible for "on-the-ground" application of program measures are headquartered in Manchester, Middlebury, and Rochester. Numerous individuals throughout the National Forest area are employed in carrying out the measures planned by these men.



Management of National Forest resources is based upon surveys and plans made by well-trained technicians.

STATISTICAL DATA PERTAINING TO GREEN MOUNTAIN NATIONAL FOREST

Transportation System

Roads, present mileage.....	235
planned additions	120
Trails, present mileage.....	185
planned additions	50

Wildlife Program

Deer 1961 population.....	10,325	Kill	462
Bear 1961 population.....	378	Kill	59

Fish stocking 1961

Lakes and Ponds	1,100 acres
Streams	216 miles
Brook trout	38,750
Brown trout	4,870
Rainbow trout	45,470

85 percent of the trout stocked were 6 inches long or longer.

Streams improved to date, 8 miles.

Timber Resource Data

Timber harvest

Average, last 20 years, 9.1 million board feet per year.

Planned, next 10 years, 24 million board feet per year.

Timber-stand improvement

Accomplished	26,500 acres
Planned.....	153,000 acres (next 10 years)

Reforestation

Accomplished	1,400 acres
Planned.....	500 acres

Recreation Improvements

Type	Number Existing	Additional Number Planned by 1970
Family camping units	28	225
Family picnic units	60	300
Swimming areas	1	5

Recreation Use — 1961

<i>Primary purpose</i>	<i>Number of visits</i>
Camping	4,600
Picnicking	46,800
Swimming	18,100
Winter sports	217,200
Hunting	26,800
Fishing	12,000
Hiking and riding	6,500
Canoeing	100
General enjoyment	234,000
Scientific study and hobbies	2,250
Other activities	200
Total.....	568,550

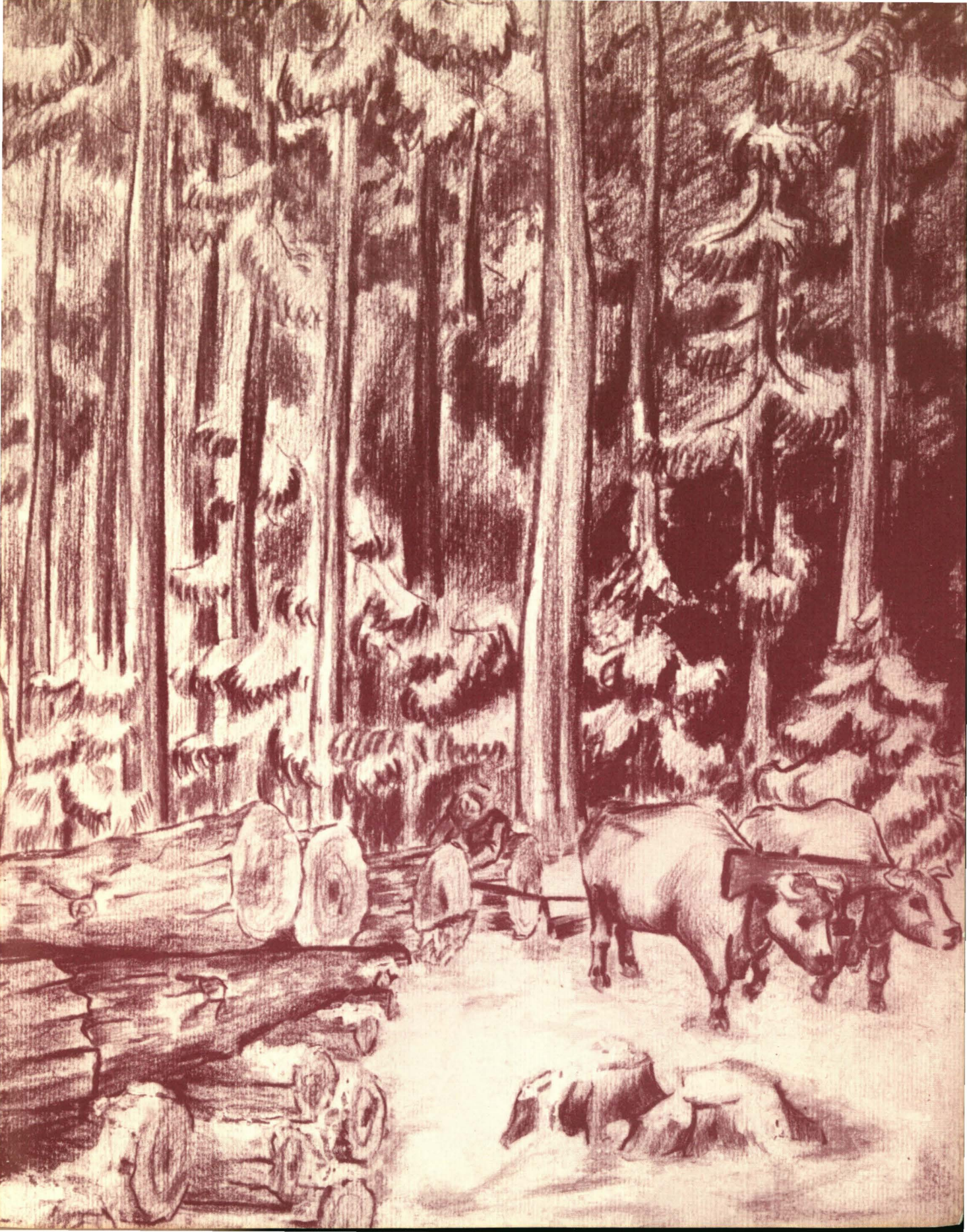
FISCAL YEAR	PAYMENT OF 25% OF RETURNS TO TOWNS WITHIN FOREST	PER ACRE
1945.....	\$ 17,995.67	10.7 cents
1946.....	14,934.37	8.9 cents
1947.....	26,414.99	15.7 cents
1948.....	29,845.47	17.8 cents
1949.....	26,068.83	12.4 cents
1950.....	23,896.56	11.4 cents
1951.....	39,961.44	19.1 cents
1952.....	35,323.56	16.0 cents
1953.....	35,747.94	15.9 cents
1954.....	42,246.02	18.8 cents
1955.....	36,271.82	15.9 cents
1956.....	49,080.17	21.8 cents
1957.....	51,226.19	22.2 cents
1958.....	23,228.60	10.1 cents
1959.....	32,969.82	14.6 cents
1960.....	37,176.24	16.0 cents
1961.....	45,713.80	19.7 cents

STATE OF VERMONT
NATIONAL FOREST AREAS BY CIVIL SUBDIVISIONS
AND ALLOCATIONS TO COUNTIES FROM RECEIPTS

June 30, 1961

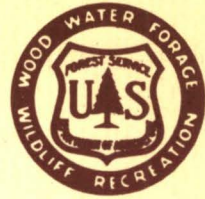
County Township	Net Forest Area-Acres	County Allocation on Basis of N. F. Land in County
Addison		\$15,520.55
Bristol	4,881	
Goshen	3,132	
Granville	12,970	
Hancock	19,263	
Leicester	2,551	
Lincoln	9,433	
Middlebury	2,476	
Ripton	20,819	
Salisbury	3,209	
Total.....	78,734	
Bennington		12,243.72
Dorset	1,450	
Langrove	591	
Manchester	3,717	
Peru	17,047	
Readsboro	2,016	
Searsburg	5,670	
Sunderland	16,883	
Winhall	6,431	
Woodford	8,306	
Total.....	62,111	
Rutland		10,490.08
Brandon	89	
Chittenden	15,986	
Mount Holly	2,611	
Mount Tabor	24,756	
Pittsfield	2,463	
Wallingford	7,310	
Total.....	53,215	

County Township	Net Forest Area-Acres	County Allocation on Basis of N. F. Land in County
Washington		\$ 926.41
Warren	3,269	
Windham		2,926.93
Dover	2,066	
Londonderry	257	
Somerset	8,873	
Stratton	2,126	
Wilmington	1,526	
Total.....	14,848	
Windsor		3,888.11
Rochester	10,685	
Stockbridge	158	
Weston	8,881	
Total.....	19,724	
TOTAL FOR VERMONT..	231,901	45,713.80





*National Forests -
America's Playgrounds*



Forest Service

Eastern Region

U. S. DEPARTMENT OF AGRICULTURE